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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte PHILIP J. LINGLE, SCOTT V. THOMSEN,
ANTON DIETRICH, and JENS-PETER MULLER

Appeal 2008-0015
Application 10/645,836
Technology Center 1700

Decided: April 30, 2008

Before CHARLES F. WARREN, JEFFREY T. SMITH, and
LINDA M. GAUDETTE, *Administrative Patent Judges*.

SMITH, *Administrative Patent Judge*.

DECISION ON APPEAL

This is an appeal under 35 U.S.C. § 134 from a final rejection of claims 1, 3-23, 28-39, 43, and 44. We have jurisdiction under 35 U.S.C. § 6.

Appellants' invention relates to a coated article including a multi-layer coating supported by a glass substrate. According to Appellants, the

coated articles may be used in architectural windows, insulating glass (IG) window units, and automotive windshields. (Spec. [0002]). Representative claim 1 appears below:

1. A coated article including a multi-layer coating supported by a glass substrate, the multi-layer coating comprising, from the glass substrate outwardly:
 - a layer comprising silicon nitride located directly on and contacting the glass substrate;
 - a layer comprising zinc oxide located directly on and contacting the layer comprising silicon nitride;
 - a layer comprising silver located over and contacting the layer comprising zinc oxide;
 - a dielectric layer comprising a metal oxide;
 - another layer comprising silver;
 - another dielectric layer; andwherein the coated article is heat treated and has a ratio T_{vis}/R_s of at least 25 after heat treatment (where T_{vis} is visible transmission (%) and R_s is sheet resistance of the coating in units of ohms/square) and a ΔE^* value (glass side reflective and/or transmissive) of less than or equal to about 8 due to the heat treatment.

The Examiner relies on the following reference in rejecting the appealed subject matter:

Krisko	6,060,178	May 9, 2000
Rondeau	6,355,334 B1	Mar. 12, 2002
Hartig	US 2002/0102352 A1	Aug. 1, 2002
Ebisawa	6,472,072 B1	Oct. 29, 2002
Laird	US 2003/0150711 A1	Aug. 14, 2003

I. Claims 1, 3-5, 9-14, 22-23, 31-33, 38-39 and 44 stand rejected under 35 U.S.C. § 102(b) as anticipated by Krisko.

II. Claims 1, 3-5, 8, 10-14, 16-17, 19-23, 30, 32-33, 35-37, 39 and 44 stand rejected under 35 U.S.C. § 102(e) as anticipated by Ebisawa.

III. Claims 23, 32-33, 35, 38, 39 and 44 stand rejected under 35 U.S.C. §§ 102/103 as unpatentable over Rondeau.

IV. Claims 1, 6-7, 15-16, 18, 23, 28-29, 34, 39 and 43 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Laird in view of Hartig.

35 U.S.C. § 102 Rejections

Claims 1, 3-5, 9-14, 22-23, 31-33, 38-39 and 44 stand rejected under 35 U.S.C. § 102(b) anticipated by Krisko; and claims 1, 3-5, 8, 10-14, 16-17, 19-23, 30, 32-33, 35-37, 39 and 44 stand rejected under 35 U.S.C. § 102(e) as anticipated by Ebisawa.

We AFFIRM.

The issue before us is whether Appellants have shown that the Examiner erred in rejecting the claims under 35 U.S.C. § 102. The issue turns on whether the Examiner has established a reasonable belief that the property or characteristic recited in the claims¹ would have been inherent to

¹ The property or characteristic recited in claim 1 is: “wherein the coated article is heat treated and has a ratio T_{vis}/R_s of at least 25 after heat treatment (where T_{vis} is visible transmission (%) and R_s is sheet resistance of the coating in units of ohms/square) and a ΔE^* value (glass side reflective and/or transmissive) of less than or equal to about 8 due to the heat treatment.” The other rejected independent claims (23 and 39) recite the same property or characteristic with the exception that claim 23 requires “a ratio T_{vis}/R_s of at least 34” and claim 39 requires “a ratio T_{vis}/R_s of at least 32.” In addition, Claim 39 requires that “when the coated article is exposed to about 650 degrees C of heat treatment for 12 minutes as a reference, the coated article retains at least 98% of its pre-heat-treatment visible transmission”.

the product of the cited references, and whether the Appellants have adequately rebutted the Examiner's position by showing that the characteristic or property is not possessed in the cited references.

Specifically, the issue is: Has the Examiner shown that each of the Krisko and Ebisawa references describe a coated article including a multi-layer coating supported by a glass substrate as claimed and, if so, have Appellants established that the resulting coated articles of Krisko and Ebisawa, respectively, do not possess the recited characteristics?. We answer the first question in the affirmative and the second question in the negative.

Where the Examiner establishes a reasonable belief that the property or characteristic recited in the claims would have been inherent to the product or process, the burden of proof shifts to Appellants to show that this characteristic or property is not possessed by the prior art. *See In re Best*, 562 F.2d 1252, 1255 (CCPA 1977); *In re Spada*, 911 F.2d 705, 708 (Fed. Cir. 1990).

Appellants' claim 1² requires the following structure (i.e., glass substrate plus six coating layers): glass/silicon nitride/zinc oxide/silver containing layer/dielectric (metal oxide)/ silver containing layer/dielectric.³

The Examiner has carried the burden of making out a *prima facie* case of anticipation in the first instance by pointing out where each and every element of the claimed invention, arranged as required by claim 1, is

² Appellants' arguments (and, therefore, our analysis) focus on independent claim 1. As indicated below, we have considered all separate arguments for patentability of the remaining rejected claims.

³ Independent claim 23 requires the following structure: glass/ silicon nitride/zinc oxide/silver containing layer/dielectric. Independent claim 39 requires the following structure: glass/silicon nitride/metal oxide/silver containing layer/dielectric.

described identically in the references, either expressly or under the principles of inherency. We agree with the Examiner that Krisko (Example 2) and Ebisawa (Example 1) exemplify Appellants' claimed multilayer coating structure. Therefore, the Examiner has set forth a reasonable basis to conclude that the coated articles of Krisko and Ebisawa inherently possess the claimed physical properties relating to the visible light transmission, sheet resistance, and ΔE^* .

Appellants have not addressed the structure relied upon by the Examiner in traversal of the stated rejections. Rather, Appellants argue that the embodiments of Krisko and Ebisawa relied upon by the Examiner do not necessarily comprise T_{vis}/R_s and ΔE^* required by the claimed invention. (App. Br. 12-13, 16-17). Appellants have not asserted that multilayer structures having the claimed layer configuration could have properties relating to the visible light transmission, sheet resistance, and ΔE^* that are different than those required by the claimed invention.

Appellants' position regarding the Krisko reference is based upon an interpretation of the Example 1 embodiment. (App. Br. 12-13). This argument is not persuasive because the structure of Krisko's Example 1 is not the same as Example 2, i.e., the embodiment relied on by the Examiner in rejecting the claims. Appellants have not adequately explained why the characteristics of Krisko's Example 1 would necessarily be the same as those of Example 2. Regarding Ebisawa, Appellants contend that Example 1 of Ebisawa does not provide enough information to calculate the T_{vis}/R_s and ΔE^* required by the claimed invention. Appellants argue that the examples of Ebisawa that comprise enough information to calculate the T_{vis}/R_s and ΔE^* do not have values which fall within the scope of the claimed

invention. (App. Br. 16-17). Here again, Appellants' argument is not persuasive because the structure of the argued examples are not the same as Example 1 of Ebisawa, i.e., the embodiment relied on by the Examiner. Appellants have not adequately explained why the characteristics of these examples would necessarily be the same as those of Example 1.

The Examiner has established a reasonable belief that the property or characteristic recited in the claims would have been inherent to the coated articles of Krisko and Ebisawa. Consequently, the burden of proof shifted to Appellants to show that this characteristic or property is not possessed by the prior art. *See In re Best supra; In re Spada supra.* Appellants have failed to provide evidence that establishes Krisko and Ebisawa do not have the claimed characteristics.

As to Appellants' assertions of patentability of the remaining claims over Krisko and Ebisawa, we do not view Appellants' statements as presenting separate arguments for patentability. *See 37 C.F.R. § 41.37(c)(1)(vii)* ("A statement which merely points out what a claim recites will not be considered an argument for separate patentability of the claim."). In any event, Appellants' statements regarding these claims are not persuasive for the reasons set forth above. That is, the claims are directed to characteristics of the coated article. However, as stated above Krisko and Ebisawa describe coated articles having the claimed structure. Appellants have not adequately established that the structures of Krisko and Ebisawa do not possess the claimed characteristics.

Claims 23, 32-33, 35, 38, 39 and 44 stand rejected under 35 U.S.C. § 102/103 as unpatentable over Rondeau.⁴ The Examiner has thus rejected the claims under two alternative statutory grounds.

We AFFIRM as to both grounds of rejection.

We consider first the issue of whether Appellants have shown that the Examiner erred in rejecting the claims under 35 U.S.C. § 102. The issue turns on whether the Examiner has established that the cited prior art describes the claimed product and therefore has a reasonable belief that the property or characteristic recited in the claims would have been inherent to the product of the cited reference, and whether the Appellants have adequately rebutted the Examiner's position by showing that the claimed characteristic or property is not possessed in the cited reference.

Specifically, the issue is: Has the Examiner shown that the Rondeau reference describes to a person of ordinary skill in the art a coated article including a multi-layer coating supported by a glass substrate and, if so, have Appellants established that the resulting product of Rondeau does not possess the recited characteristics? We answer the first question in the affirmative and the second question in the negative.

Appellants' claims 23 and 39 recite the following layered structure: glass/silicon nitride/zinc oxide/silver containing layer/dielectric.

The Examiner has carried the burden of making out a prima facie case of unpatentability in the first instance by pointing out where each and every element of the claimed invention, arranged as required by claims 23 and 39, is suggested identically in the reference. The Examiner also properly

⁴ Appellants' arguments for this rejection appear on pages 24-25 of the Brief.

determined that this structure would possess either expressly or under the principles of inherency the characteristics of the claimed invention. We agree with the Examiner that Rondeau describes the claimed coated article. The Examiner properly determined that Rondeau describes to a person of ordinary skill in the art a structure that comprises the claimed invention including the dielectric layer. The Examiner properly concluded a person of ordinary skill in the art would have recognized that silicon nitride was described as the first dielectric layer. (Ans. 14). Appellants have not specifically challenged the Examiner's determination regarding forming the structure of the multilayer article. Rather Appellants argue that Rondeau fails to disclose the T_{vis}/R_s and ΔE^* characteristics of claims 23, 33 and 39.⁵ (App. Br. 24-25). However, Appellants have failed to provide evidence that establishes the multilayer article of Rondeau does not have the claimed characteristics. See *In re Best*, *In re Spada* *supra*.

For the above reasons, we find that claims 23, 32-33, 35, 38, 39 and 44 are anticipated by Rondeau. Consequently, we affirm the rejection under 35 U.S.C. § 102(b) over this reference. Because anticipation is the epitome of obviousness, see *In re Baxter Travenol Laboratories*, 952, F.2d 388, 391 (Fed. Cir. 1991); *In re Fracalossi*, 681 F.2d 792, 794, 215 USPQ 569, 571 (CCPA 1982); *In re May* 574 F.2d 1082, 1089 (CCPA 1978), we affirm the rejection under 35 U.S.C. § 103 over Rondeau.

35 U.S.C. § 103 Rejection

⁵ For this ground of rejection, Appellants have not presented separate arguments for the remaining rejected claims. Thus, the patentability of the remaining claims will stand or fall with the argued claims.

Claims 1, 6-7, 15-16, 18, 23, 28-29, 34, 39 and 43 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Laird in view of Hartig.

We REVERSE.

The issue before us is whether the Laird reference is available as prior art due to 35 U.S.C. § 103(c). The issue turns on the question of whether or not Appellants have established that the claimed invention was commonly owned with Laird at the time the invention was made. We answer this question in the affirmative.

Appellants contend that Laird is unavailable as prior art. Specifically Appellants state:

On page 3 of the final rejection, the Examiner alleges that “when the structure recited in the reference is substantially identical to that of the claims, the claimed properties or function are presumed inherent.” If this were true, the [sic] claim 1 would be entitled to the filing date of parent case 10/400,080 (filed March 27, 2003), and Laird would not be prior art and could not be used in a Section 103(a) rejection (note that parent case 10/400,080 has all the layers recited in claim 1, and the bottom titanium based layer is said to be “optional” in 10/400,080). Laird is commonly owned with the instant application and was commonly owned at the time of the invention, and thus could not be used in a Section 103 rejection if claim 1 is entitled to a filing date of March 27, 2003 as the Examiner contends. Thus, if the aforesaid statement of the Examiner is to be taken as true and relied on by the USPTO in any way, then all Section 103(a) rejections based on Laird should be withdrawn or reversed due to 35 U.S.C. Section 103(c). (App. Br. 21).

We determine that this statement is adequate to establish common ownership of the claimed invention and Laird at the time of invention. *See*

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MPEP § 706.02(I)(2). Consequently, Laird is not available as prior art to the claimed invention.

ORDER

The rejection of claim 1, 3-5, 9-14, 22-23, 31-33, 38-39 and 44 under 35 U.S.C. § 102(b) anticipated by Krisko; claims 1, 3-5, 8, 10-14, 16-17, 19-23, 30, 32-33, 35-37, 39 and 44 under 35 U.S.C. § 102(e) as anticipated by Ebisawa; and claims 23, 32-33, 35, 38-39 and 44 under 35 U.S.C. § 102/103 as unpatentable over Rondeau are affirmed. The rejection of claims 1, 6-7, 15- 16, 18, 23, 28-29, 34, 39 and 43 under 35 U.S.C. § 103(a) as unpatentable over Laird in view of Hartig is reversed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED-IN-PART

tf/lsls

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